

They are generally terete but sometimes a little flattened or compressed. The central filaments tend to hold the spores in mass so that they do not fall away as readily as in other species, and their attachment to the apex of the peridium appears to interfere with its rupturing at that point. Two other species, viz: *Peridium Pini* Lev. and *Peridium Harknessii* Moore, have been reported as inhabitants of *Pinus ponderosa*.

DOTHIDEA DASYLIRII.—Stroma amphigenous, small, narrowly elliptical, oblong or linear, black, for a long time covered by the epidermis which is at length ruptured longitudinally; cells few, white within; asci oblong or subcylindrical; spores crowded or biseriate, oblong, often a little broader toward one end, colorless, .0012-.0017 of an inch long, .00065-.00075 broad.

Leaves of some species of *Dasyliirion*, probably *D. Wheeleri*. Arizona. May. *Pringle*.

DOTHIDEA PRINGLEI.—Stroma irregular in shape, variable in size, two to twelve lines long, penetrating the matrix deeply, amphigenous, black, surface uneven, coarsely papillose by the scattered slightly prominent ostiola, cells unequal, deeply seated; asci cylindrical; spores oblong-elliptical, smooth, uniseriate, colored, .0012-.0016 of an inch long, .0008 broad, often containing two or more nuclei.

Living and languishing leaves of *Yucca macrocarpa*. Arizona. May. *Pringle*.

Sometimes the surface of the stroma is shining, but usually it is opaque.

TEICHOSPORA ARIDOPHILA.—Perithecia minute, .01-.012 of an inch in diameter, scattered, hemispherical or depressed, black, ostium minute, papilliform; asci subcylindrical, .0045-.0048 of an inch long, .0011-.0012 broad; spores crowded or biseriate, oblong or obovate, slightly constricted in the middle, muriform, colored, .0011-.0014 of an inch long, .0005-.0006 broad.

Bleached surface of dry wood. Arizona. May. *Pringle*.

This species is closely related to *T. obducens*, but differs so much in habit, that it seems best to separate it.

Selenia aurea.—Growing with the normal form of this species, having *golden yellow* petals, is a variety with the petals pale canary yellow.

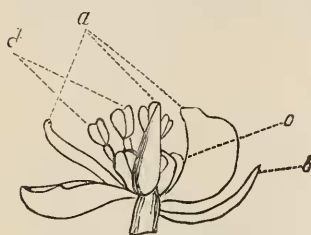
This species has fragrant flowers. The pleasant odor is wafted with the wind to a considerable distance from a large patch.

The golden yellow of the petals is so intense that it is painful to the eyes to look for any length of time at a large patch in the bright sunshine.

The flowers are so conspicuous they would make a striking appearance in a flower garden planted in bunches.—F. L. HARVEY.

Notes on Ranunculus.—While examining some specimens

of *R. abortivus*, var. *micranthus*, my attention was called to a singular structure in a head of carpels and occupying the normal position of an achenium. Upon examination it proved to be a flower of the following structure. The flower was raised on a short peduncle and subtended by a bract (b). The calyx (a) was very irregular, no two of the *four* sepals being of the same shape. The corolla was obsolete. The stamens (d), eight in number, were nearly normal though in some the filament and anther seemed to blend. There were about ten carpels (c) of normal shape excepting the beak was somewhat elongated. The accompanying figure shows the relation



of the parts, but is greatly magnified, the flower really being no longer than one of the carpels. The stamens and petals of the flower, in the head of which this structure occurred, had fallen.

This variety of *R. abortivus* in this region has the carpels in an elongated head, the length being often twice the diameter.

There is another variety of this species (var. *grandiflora*) which grows upon cliffs high above the valleys, in which the petals far exceed the sepals in length, and the flower expands half an inch.

Ranunculus fascicularis, Muhl., has in this region entire root-leaves and beginners *invariably* place it along with *R. rhomboideus*, if they use Gray's Manual, as this "root leaves are not divided to the very base." Is it unusual for this plant to have entire root-leaves, or is there some defect in the key?—F. L. HARVEY, *Fayetteville, Ark.*

A Synopsis of the North American Lichens.* Part I, comprising the Parmeliacei, Cladoni, and Cœnogoni; by Edward Tuckerman, M. A.; Boston, S. E. Cassino, 1882.—This book is exactly what is needed to give an impetus to the study of Lichens. Heretofore very few botanists have been attracted to their study from the great lack of convenient literature, but one can hardly turn over the handsomely printed pages of this little octavo volume without feeling a desire to cultivate a field that has so long been neglected. If ever the proverbial "felt want" was a real one it was in this case; and has been supplied by the only person really able to publish an authoritative work of this kind. In this book of some 260 pages the author has described the species of one tribe, the *Parmeliacei*, containing nearly 40 genera, and two families under the tribe *Lecideacei*, namely, *Cladoni* and *Cœnogoni*; both of which add but four genera. These comprise the more conspicuous lichens, just those to which students are first attracted. In view of the

*The above notice was prepared for the April GAZETTE, but by mistake was omitted.